

## Largest Hamburger Ever?



Mallie's Sports Grill, a Michigan restaurant, recently made an approximately 350 pound burger in an effort to set the world record for the largest hamburger ever made. It looks delicious. Here are the details:

It takes 20 hours to bake 270 pounds of hamburger and eight hours to cool it in a freezer.

The burger cooks down to a 180-pound patty. You lose about 90 pounds as it becomes grease!

The burger details:

180-pound ground beef patty

Its bun weighs 100 pounds.

Mallie's uses 20 pounds of American cheese,

15 pounds of tomatoes,

15 pounds of onions,

10 pounds of pickles,

10 pounds of bacon

and 10 pounds of lettuce.

1. How much does this burger, with all the toppings weigh?
2. I can't believe you lose so much of the hamburger when it is cooked. In this case the burger started out weighing 270 pounds and ended up weighing 180 pounds after cooking. I have consumed burgers that weighed one pound before cooking. Assuming the weight of the original beef, beef that becomes grease and final burger weight are proportional what part of the original one pound burger should remain after cooking?
3. If this restaurant wants to have a 400 pound patty after it has been cooked, what weight should they start out with? It took 20 hours to cook the 270 pound burger, so how long should it take them to cook this larger burger?

4. I am planning to open my own large burger grill. I will create huge burgers that can be cut up and shared by large groups. Help me determine how much I will need of each ingredient and how long I will need to cook the burger. I am keeping the same ratio of cooking times and pounds of ingredients. I would like to make a 30-pound, a 10 pound-burger, and a four-pound burger. I also plan to charge \$12 for a four-pound burger. Use the multi-variable ratio table below to help you find the amount of beef I need to use, weight of the bun, weight of cheese, weight of extra ingredients, hours to cook and cost for each of these burgers.

I have included extra rows in the table. You can use these rows to help you get to the 30, 10 and 4-pound burgers.

Original Weight of Beef in Pounds	Final Weight of Cooked Beef in Pounds	Hours to Cook	Weight of Bun in Pounds	Weight of Cheese in Pounds	Combined Weight of Toppings	Total Pounds of Burger (Using Final Weight of Beef, Bun, Cheese and Toppings)	Cost
270	180	20	100	20	60	360	
						30	
						10	
						4	\$12

5. A typical burger that you get at a restaurant weighs about  $\frac{2}{3}$  of a pound and along with some fries typically feeds one person. How many of these  $\frac{2}{3}$  pound burgers would you need to eat to eat the equivalent of the 360 pound burger? At that rate how many people should the 360 pound burger feed?
6. On one of these  $\frac{2}{3}$  pound burgers I usually use the equivalent of two ketchup packets. Keeping the same ratio of burger to ketchup, how many ketchup packets would I need for a 360 pound burger?
7. If all of the people that live in your home bought one 360 pound hamburger from Mallie's Sports Grill and ate  $\frac{2}{3}$  pound servings each every evening for dinner (and could keep it so that it wouldn't become spoiled), how many days would your family be eating hamburger?